

What is claimed is:

1. An air conditioning system for a vehicle that includes a first seat and a second seat, the air conditioning system comprising:

a first discharge opening for discharging conditioning air around the first seat;

a second discharge opening for discharging conditioning air around the second seat;

a first non-contacting temperature sensor for measuring a surface temperature of an occupant seated in the first seat without contacting the occupant in the first seat;

a second non-contacting temperature sensor for measuring a surface temperature of an occupant seated in the second seat without contacting the occupant in the second seat;

an occupant detecting means for detecting presence of the occupant in one of the first and second seats; and

an air conditioning control means for independently controlling air conditioning state around the first seat and air conditioning state around the second seat according to a first target discharge air temperature determined for the conditioning air to be discharged from the first discharge opening and a second target discharge air temperature determined for the conditioning air to be discharged from the second discharge opening, wherein:

the air conditioning control means determines the first target discharge air temperature based on a temperature measurement of the first non-contacting temperature sensor and

a desired preset temperature of air around the first seat and also determines the second target discharge air temperature based on a temperature measurement of the second non-contacting temperature sensor and a desired preset temperature of air around the second seat; and

when the occupant detecting means indicates absence of the occupant in the one of the first and second seats, the air conditioning control means adjusts one of the temperature measurement, the preset temperature and the target discharge air temperature associated with the one of the first and second seats and controls the air conditioning state around the one of the first and second seats based on the adjusted one of the temperature measurement, the preset temperature and the target discharge air temperature associated with the one of the first and second seats.

2. The air conditioning system according to claim 1, wherein when the occupant detecting means indicates the absence of the occupant in the one of the first and second seats, the air conditioning control means adjusts the temperature measurement associated with the one of the first and second seats to a value, which is equal to the temperature measurement associated with the other one of the first and second seats or is closer to the temperature measurement associated with the other one of the first and second seats than the temperature measurement associated with the one of the first and second seats, and controls the air conditioning state around the one of the first

and second seats based on the adjusted temperature measurement associated with the one of the first and second seats.

3. The air conditioning system according to claim 1, wherein when the occupant detecting means indicates the absence of the occupant in the one of the first and second seats, the air conditioning control means adjusts the temperature measurement associated with the one of the first and second seats to a predetermined value and controls the air conditioning state around the one of the first and second seats based on the adjusted temperature measurement associated with the one of the first and second seats.

4. The air conditioning system according to claim 1, wherein when the occupant detecting means indicates the absence of the occupant in the one of the first and second seats, the air conditioning control means adjusts the one of the temperature measurement, the preset temperature and the target discharge air temperature associated with the one of the first and second seats in such a manner that the air conditioning state around the one of the first and second seats is adjusted to air conditioning state, which substantially coincides with the air conditioning state around the other one of the first and second seats or is closer to the air conditioning state around the other one of the first and second seats than the air conditioning state around the one of the first and second seats.

5. The air conditioning system according to claim 1, wherein when the occupant detecting means indicates the absence of the occupant in the one of the first and second seats, the air conditioning control means adjusts the target discharge air temperature associated with the one of the first and second seats to a value, which is equal to the target discharge air temperature associated with the other one of the first and second seats or is closer to the target discharge air temperature associated with the other one of the first and second seats than the target discharge air temperature associated with the one of the first and second seats, and controls the air conditioning state around the one of the first and second seats based on the adjusted target discharge air temperature associated with the one of the first and second seats.

6. The air conditioning system according to claim 1, wherein when the occupant detecting means indicates the absence of the occupant in the one of the first and second seats, the air conditioning control means controls the air conditioning state around the one of the first and second seats in such a manner that the temperature measurement associated with the one of the first and second seats substantially coincides with a predetermined temperature value.

7. The air conditioning system according to claim 6, further comprising an outside air temperature sensor for measuring an temperature of air outside a passenger compartment of the vehicle,

wherein the air conditioning control means determines the predetermined temperature value based on the outside air temperature measured with the outside air temperature sensor.